

In the Claims

Please cancel claims 2,4,12, and 14 without prejudice.

Applicant requests amendment of the remaining claims as follows:

Please substitute the amended claim set as provided below for the respective pending claims.

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1. An endovascular graft comprising an expandable stent portion and a stent cover portion, wherein the stent cover portion is coated on at least the outer surface with a bioactive agent covalently attached in the form of a thin, conformal coating in a manner sufficient to promote initial thrombus formation.

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3. A graft according to claim 1 wherein the stent cover portion is prepared from a porous material selected from PET and ePTFE and the bioactive agent comprises collagen.

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5. A graft according to claim 1 wherein the agent is attached by the activation of photoreactive groups provided by the stent cover portion, by the bioactive agent, and/or by a linking agent.

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7. A graft according to claim 6 wherein the agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin and von Willebrand factor. 3/16/05

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9. A graft according to claim 1 wherein the agent is attached to the stent cover portion in a manner that provides a) a minimal increase in overall bulk, sufficient to permit the graft to be deployed in a minimally invasive fashion, and b) a combination of coating density, coating tenacity and bioactivity sufficient to permit the coating to substantially prevent endoleaking when deployed and used *in vivo*.

10. An endovascular graft comprising an expandable stent portion and a porous stent cover portion selected from PET and ePTFE, the porous stent cover portion being coated with a

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bioactive agent comprising collagen, wherein the collagen is covalently attached in a thin, conformal coating to the porous stent cover portion in a manner sufficient to promote initial thrombus formation followed by long term fibrous tissue ingrowth, and wherein the coating is covalently attached by the activation of photoreactive groups provided by the porous stent cover portion, by the bioactive agent, and/or by a linking agent.

11. A method of preparing an endovascular graft comprising an expandable stent portion and a stent cover portion, comprising the step of coating at least the outer surface of the stent cover portion with a bioactive agent that is covalently attached in the form of a thin, conformal coating in a manner sufficient to promote initial thrombus formation.

13. A method according to claim 11 wherein the stent cover portion is prepared from a porous material selected from PET and ePTFE and the bioactive agent comprises collagen.

15. A method according to claim 11 wherein the agent is attached by the activation of photoreactive groups provided by the stent cover portion, by the bioactive agent, and/or by a linking agent.

16. A method according to claim 11 wherein the agent is selected from the group consisting of proteins having a specific hemostatic effect, and positively charged compounds having a nonspecific hemostatic effect.

17. A method according to claim 16 wherein the agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin, and von Willebrand factor.

19. A method according to claim 11 wherein the agent is attached to the stent cover portion in a manner that provides a) a minimal increase in overall bulk, sufficient to permit the graft to be deployed in a minimally invasive fashion, and b) a combination of coating density,